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THE CYPRAEID FAUNA OF THE GALAPAGOS ISLANDS*

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N ATTEMPT is here made to list the entire Cypraeid fauna of the Galapagos Islands. No writer who has worked with the Mollusca of these islands has yet included all the Cypraeidae. Stearns (1893) listed Cypraea exanthema Linnaeus var. (= Cypraea cervinetta Kiener) from James and Indefatigable Islands; Cypraea nigropunctata Gray from James, Hood, and Indefatigable Islands; and Cypraea albuginosa Gray from James Island. Tomlin (1927) listed Cypraea nigropunctata Gray from Charles and Narborough Islands. Wimmer (1880) lists Cypraea exanthema Linnaeus [Cypraea cervinetta Kiener] from the Galapagos Islands; Cypraea albuginosa Gray from Charles Island; and Cypraea nigropunctata Gray from Hood and Bindloe Islands. Hertlein (1937) lists Cypraea moneta Linnaeus from the Galapagos Islands.¹ Pilsbry and Vanatta (1902) listed Cypraca exanthema cervinetta Kiener [Cypraea cervinetta Kiener] from Tagus Cove, Albemarle Island, and from Narborough Island; and Cypraea nigropunctata Gray from Point Christopher, Albemarle, and from Narborough Islands. Fossil records have been reported by Hertlein and Strong (1939) who list Cypraea nigropunctata Gray from late Pleistocene of James Bay, James (San Salvador) Island, from the late Pleistocene of South Seymour Island, and from the late Pleistocene or as a subfossil from Tagus Cove, Albemarle (Isabella) Island; and by Dall and Ochsner (1928) who reported a *Cypraea* (young) aff. *cervinetta* Kiener from the Pliocene of Seymour Island, and Cypraea albuginosa Gray from the Pleistocene of Albemarle Island. The writer has examined this latter specimen,

* Manuscript received October 19, 1944.

† No specific locality within the Galapagos Islands was indicated.

identified by Dall and Ochsner (1928) as *C. albuginosa* Gray, and has found it to be unmistakably a mature individual of *Cypraca nigropunctata* Gray.

Seven living and one new fossil species represent the complete Cypraeid fauna of the Galapagos Islands as reported today. The living species are: *Cypraca moneta* Linnaeus, *Cypraca isabella mexicana* Stearns, *Cypraea arabicula* Lamarck, *Cypraea cervinetta* Kiener, *Cypraea nigropunctata* Gray, *Cypraea albuginosa* Gray, and *Pustularia pustulata* (Lamarck). A new fossil species is herein described as *Cypraea darwini*. Collections indicate that only one species, *Cypraea nigropunctata* Gray, is really common in the waters about the Galapagos Islands. The material examined shows that the other species are relatively rare. In the course of compiling data for this paper, 465 specimens were examined.

The Cypraeid fauma of the Galapagos Islands is typically allied to that of the coastal waters of the West Coast of the Americas. Hertlein and Strong (1939) pointed out that the Galapagos Islands lie about 600 miles west of Ecuador, and that the cool Humboldt current sweeping up the coast of Peru serves to make the shore climate of the Islands unusually cool even though they lie on the equator. The number of western American Cypraeidae found in the Galapagos Islands indicates that these temperate zone species can adapt themselves to the shore water conditions about these islands, for of the nine typical West Coast species all but three, *Cypraca spadicea* Swainson, *Cypraca annettae* Dall, and *Cypraca robertsi* Hidalgo, are found in the Galapagos Islands. Available data indicate that the migration from West Coast waters of at least one species, *Cypraca cervinetta* Kiener, began in the Pliocene, and that of *C. nigropunctata* Gray began in the Pleistocene,

The single example of migration from the Indo-Pacific to this island group is *Cypraea moneta* Linnaeus. Clipperton Island, about 670 miles southwest of Acapuleo, Mexico, is approximately 10 degrees north of the equator, and possesses a greater number of Indo-Pacific and Polynesian species of Cypraeidae than the Galapagos, although both are approximately the same distance from the coasts of the Americas. In contrast with the one Indo-Pacific species in the Galapagos, it is interesting to note that Hertlein (1937) has reported five tropical Pacific Cypraeidae from Clipperton Island: *Cypraea gillei* Jousseaume (*C. intermedia* Gray), *Cypraea isabella* Linnaeus, *Cypraea moneta* Linnaeus, *Cypraea scurra* Chemnitz, and *Cypraea teres* Gmelin. It is possible that any great number of Indo-Pacific or tropical Pacific Cypraeidae is prevented from becoming established in the Galapagos Islands by the relative coolness of the sea and lack of coral reef formation.

Because of the importance of the Galapagos Islands as one of the frontiers of western American and tropical Pacific Cypraeidae, measurements are given of the specimens on which this study is based, to permit ready comparison by others working on these species. Also included as a comparative aid are the mainland records of localities of the species listed from the Galapagos.

The writer wishes to thank Dr. G. Dallas Hanna and Dr. Leo George

Hertlein of the California Academy of Sciences for allowing him to study the collection of Galapagos Island Cypraeidae upon which this paper is based. Appreciation is expressed to the following individuals who permitted the writer to examine Cypraeid records from the West Coast of the Americas: Dr. Paul Bartsch and Dr. Harald Rehder, United States National Museum; Dr. Henry A. Pilsbry, The Academy of Natural Sciences, Philadelphia; Mr. William J. Clench, Harvard University; and the late Dr. Bruce L. Clark, University of California.

Species List

Cypraea albuginosa Gray

Galapagos Islands records:

James Island (4 specimens: 3 beach, 1 living).

Length 27 mm.; breadth 15 mm.; height 12 mm. Length 23 mm.; breadth 14 mm.; height 10 mm. Length 22 mm.; breadth 12 mm.; height 10 mm. Length 20 mm.; breadth 11 mm.; height 9 mm.

Hood Island (2 specimens: 1 beach, 1 living).

Length 28 mm.; breadth 18 mm.; height 13 mm. Length 32 mm.; breadth 20 mm.; height 15 mm.

Albemarle Island, Banks Bay (1 specimen, beach).

Length 27 mm.; breadth 16.50 mm.; height 13 mm.

The 32 mm.-long Hood Island individual is larger than any of the numerous specimens that the writer has examined from the coastal waters of the Americas.

Mainland records*

- United States National Museum: La Paz, Cape San Lucas, Lower California; southwest side of Ceralbo Island ("Ceralleo" Island), and San José Island, Gulf of California; Tres Marias Islands; Mazatlán, Mexico; Panama.
- California Academy of Sciences: Maria Madre Island, Tres Marías, Mexico; Bay of Panama, Panama.

Harvard University: Cape San Lucas, Lower California.

University of California: Mazatlán, San Pedro, northwest of Guaymas, Sonora, Mexico; Marquer Bay, Carmen Island, Gulí of California.

* The distribution records listed here were selected by the writer as being authentic; not all records were taken when a question of authenticity arose. Only specific localities were used. Additional records have no doubt been added to the collections since the writer's visits from 1937 to 1942. Too, it is likely that some records were inadvertently overlooked under the pressure of time; an indication of the true range is indicated nevertheless.

Cypraea arabicula Lamarck

Galapagos Islands records:

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Hood Island (2 specimens: 1 beach, 1 living)

Length 29 mm.; breadth 20 mm.; height 15 mm. Length 27 mm.; breadth 18 mm.; height 13 mm.

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Indefatigable Islands (1 specimen, beach) Length 23 mm.; breadth 13 mm.; height 10 mm.

The Indefatigable Island record is that of an individual far below the mean size of the species. It is notably elongate in shape.

Mainland records:

- United States National Museum: Mazatlán, Acapulco, and Manzanillo, Mexico; Cape San Lucas, Lower California; southwest side of Ceralbo ("Ceralvo") Island, San José Island, Concepción Bay, Lower California; Corinto, Nicaragua; Punta Dominical, Costa Rica; Panama.
- California Academy of Sciences: Mazatlán, Tenacatita Bay, Tangola-Tangola Bay, Tres Marias Islands, Mexico; Corinto, Nicaragua; Bat Island, Costa Rica; Bahía Honda, Taboga Island, Changame Island, Venado Island, Panama.
- University of California: Mazatlán, Mexico; (recent; fossil) San Pedro Bay, northwest of Guaymas, Mexico.

Cypraea cervinetta Kiener

Galapagos Islands records:

Albemarle Island (2 specimens, beach)

Length 71 mm.; breadth 33 mm.; height 25 mm. Length 73 mm.; breadth 38 mm.; height 29 mm.

Albemarle Island, Tagus Cove (3 specimens, beach)

Length 89 mm.; breadth 42 mm.; height 33 mm. Length 82 mm.; breadth 39 mm.; height 29 mm. Length 81 mm.; breadth 41 mm.; height 31 mm.

Hood Island (1 specimen, living)

Length 83 mm.; breadth 39 mm.; height 28 mm.

James Island (1 specimen, living; in tide pool)

Length 83 mm.; breadth 41 mm.; height 28 mm.

Indefatigable Island, Academy Bay (2 specimens, living)

Length 78 mm.; breadth 39 mm.; height 29 mm.

Length 78 mm.; breadth 38 mm.; height 29 mm.

Indefatigable Island (2 specimens, living)

Length 65 mm.; breadth 31 mm.; height 23 mm. Length 72 mm.; breadth 34 mm.; height 26 mm.

Charles Island (1 specimen, beach) Length 84 mm.; breadth 41 mm.; height 32 mm. The tide pool record from James Island indicates one of several likely habitats for this species. All individuals are typical *C. cervinetta* Kiener. The reports of *C. exanthema* Linnaeus [= *C. zebra* Linnaeus] from the Galapagos Islands have been based on faulty identification, for this species is confined in its distribution to the Atlantic side of Central America. A closely related species, *Cypraea cervus* Linnaeus, is also found on the Atlantic side of Central America. A likely ancestral type from which these closely related species descended is the extinct Miocene species, *Cypraea trinitatensis* Mansfield, from Trinidad. Probably *C. cervinetta* Kiener, or an ancestral type, migrated through Central America to the Pacific, and then was isolated from its parental stock with the closure of the migrational pathway sometime in the Miocene. The two living East Coast species, *Cypraea zebra* Linnaeus and *Cypraea cervus* Linnaeus, appear to have remained closer to their center of origin.

Mainland records:

- United States National Museum: Margarita Bay, La Paz, and Cape San Lucas, Lower California; Guaymas, Mazatlán, and Mendia (Sinaloa), Mexico; Panama; Manta, Ecuador; Payta (Paita), Peru.
- California Academy of Sciences: Isabel Island, Mexico; Corinto, Nicaragua; Taboga Island, near Panama City, Vique Point, Panama.
- University of California: Mazatlán, Mexico; Panama; Cardalitos, Peru.
- Harvard University : Mazatlán, Mexico ; Panama City, Pearl Island, and Palo Seco, Panama.

Cypraea isabella mexicana Stearns

Galapagos Islands records:

Hood Island (4 specimens, beach)

Length 44.50 mm.; breadth 23 mm.; height 19 mm. Length 32 mm.; breadth 16 mm.; height 13 mm. Length 29 mm.; breadth 14.50 mm.; height 12 mm. Height 29 mm.; breadth 14 mm.; height 12 mm.

Abemarle Island, north of Tagus Cove on beach (2 specimens, beach)

Length 47 mm.; breadth 27 mm.; height 22 mm. Length 46 mm.; breadth 28 mm.; height 24 mm.

The two Albemarle Island individuals are more inflated than is the typical *Cypraea isabella mexicana* Stearns; too, both specimens lack a well-defined fossula. The teeth characteristic of the fossula in *C. isabella* Linnaeus and in the subspecies *mexicana* Stearns are entirely absent in one individual, and have been reduced in the other to extremely obscure nodules. If these two individuals had been examined and measured independently of a lot of 33 specimens from Clipperton Island, they might have been considered as representing a new species or subspecies. However, certain intergradations exhibited by the series from Clipperton Island seem to indicate that they are only aberrant individuals.

- United States National Museum: Cape San Lucas, Lower California; Clarion Island, Tres Marias, Mexico.
- California Academy of Sciences: Socorro Island, Revillagigedo Islands, Tres Marias Islands, Mexico.

Cypraea moneta Linnaeus

Galapagos Islands records:

Hood Island (6 specimens, heach)

Length 30 mm.; breadth 23 mm.; height 14 mm. Length 28 mm.; breadth 22 mm.; height 13 mm. Length 28 mm.; breadth 20 mm.; height 13 mm. Length 28 mm.; breadth 10 mm.; height 12 mm. Length 27 mm.; breadth 19 mm.; height 12 mm. Length 25 mm.; breadth 19 mm.; height 11 mm.

In all specimens the outer layer of shell is eroded from the dorsum, making it impossible to distinguish its original color. The lateral margins, sides, and bases are white. Two specimens have been shellacked, giving a color distortion of yellow-orange over the sides, when in reality the shell sides are white. The writer has seen individuals similar to these from the Marquesas and Tuamotu Islands; no specimens resemble the type of *C. moneta* Linnaeus found in the Hawaiian Islands.

No authentic records are available from the mainland of the Americas. Hertlein (1937) has reported this Indo-Pacific species from Cocos Island off the coast of South America, and closer to the mainland than this Galapagos Island record, a record also included by him.

Cypraea nigropunctata Gray

Galapagos Islands records:

Indefatigable Island (11 specimens: 5 living, 6 beach)

Length 34 mm.; breadth 19.50 mm.; height 15 mm. Length 30 mm.; breadth 16.50 mm.; height 13 mm. Length 30 mm.; breadth 16 mm.; height 13 mm. Length 28 mm.; breadth 15 mm.; height 13 mm. Length 28 mm.; breadth 15 mm.; height 12 mm. Length 27 mm.; breadth 15 mm.; height 12 mm. Length 26.50 mm.; breadth 14 mm.; height 10.50 mm. Length 26.50 mm.; breadth 14 mm.; height 10.50 mm. Length 25 mm.; breadth 14.50 mm.; height 12 mm. Length 25 mm.; breadth 13 mm.; height 11 mm. Length 25 mm.; breadth 13 mm.; height 11 mm. Length 24 mm.; breadth 13 mm.; height 11 mm.

Charles Island, Post Office Bay (1 specimen, heach)

Length 18 mm.; breadth 9 mm.; height 7 mm.

South Seymour Island (4 specimens, beach)

Length 30 mm.; breadth 17 mm.; height 13.50 mm. Length 27 mm.; breadth 16 mm.; height 13 mm. Length 24 mm.; breadth 13 mm.; height 10 mm. Length 24 mm.; breadth 12.50 mm.; height 10 mm.

Albemarle Island (10 specimens: 9 beach, 1 living)

Length 30 mm.; breadth 16 mm.; height 12 mm. Length 26 mm.; breadth 14 mm.; height 11 mm. Length 26 mm.; breadth 15 mm.; height 12 mm. Length 25.50 mm.; breadth 15 mm.; height 12 mm. Length 25 mm.; breadth 13 mm.; height 10 mm. Length 25 mm.; breadth 14 mm.; height 10 mm. Length 24 mm.; breadth 14 mm.; height 10 mm. Length 24 mm.; breadth 14 mm.; height 10 mm. Length 22 mm.; breadth 12 mm.; height 9 mm. Length 20 mm.; breadth 10 mm.; height 8 mm. Length 19 mm.; breadth 11 mm.; height 8 mm.

Albemarle Island, Tagus Cove (4 specimens, beach)

Length 27 mm.; breadth 15.50 mm.; height 12.50 mm. Length 25 mm.; breadth 14 mm.; height 11 mm. Length 25 mm.; breadth 14.50 mm.; height 11 mm. Length 18 mm.; breadth 10 mm.; height 8 mm.

Albemarle Island, Banks Bay (25 specimens, beach)*

Length 37 mm.; breadth 20 mm.; height 17 mm. Length 36 mm.; breadth 21 mm.; height 17 mm. Length 33 mm.; breadth 19 mm.; height 15 mm. Length 33 mm.; breadth 18 mm.; height 15 mm. Length 33 mm.; breadth 19 mm.; height 15 mm. Length 32 mm.; breadth 18 mm.; height 15 mm. Length 30 mm.; breadth 17 mm.; height 14 mm. Length 30 mm.; breadth 17 mm.; height 14 mm. Length 30 mm.; breadth 17 mm.; height 14 mm. Length 30 mm.; breadth 17 mm.; height 13 mm. Length 30 mm.; breadth 17 mm.; height 13 mm. Length 30 mm.; breadth 17 mm.; height 13 mm. Length 30 mm.; breadth 15 mm.; height 12 mm. Length 28 mm.; breadth 16 mm.; height 12 mm. Length 28 mm.; breadth 15 mm.; height 12 mm. Length 27 mm.; breadth 15 mm.; height 12 mm. Length 27 mm.; breadth 14 mm.; height 12 mm. Length 26 mm.; breadth 14 mm.; height 11 mm. Length 25 mm.; breadth 13 mm.; height 11 mm. Length 24 mm.; breadth 13 mm.; height 10 mm. Length 23 mm.; breadth 13 mm.; height 10 mm.

* Not all of the available specimens from the following localities were measured: Hood Island, 271 specimens; James Island, 56 specimens; Banks Bay, Albemarle Island, 71 specimens. Series were selected to illustrate the gradual reduction in size from the largest to the smallest. If intermediate lengths were not available to a collector, and only extreme sizes were studied, one might be led to believe that the smallest and largest were separate subspecies. Length 21 mm.; breadth 12 mm.; height 10 mm. Length 21 mm.; breadth 12 mm.; height 9 mm. Length 20 mm.; breadth 11 m.m.; height 8 mm. Length 17 mm.; breadth 9 mm.; height 7 mm.

Hood Island (21 specimens, beach)

Length 39 mm.; breadth 22 mm.; height 17 mm. Length 35 mm.; breadth 21 mm.; height 16 mm. Length 34 mm.; breadth 20 mm.; height 17 mm. Leugth 33 mm.; breadth 19 mm.; height 15 mm. Length 32 mm.; breadth 18 mm.; height 15 mm. Length 31 mm.; breadth 17 mm.; height 14 mm. Length 30 mm.; breadth 18 mm.; height 15 mm. Length 30 mm.; breadth 17 mm.; height 14 mm. Length 29 mm.; breadth 17 mm.; height 14 mm. Length 28 mm.; breadth 15 mm.; height 13 mm. Length 27 mm.; breadth 15 mm.; height 12.50 mm. Length 26 mm.; breadth 15 mm.; height 13 mm. Length 25 mm.; breadth 14 mm.; height 11 mm. Length 24 mm. : breadth 13 mm. : height 10 mm. Length 23 mm.; breadth 13 mm.; height 11 mm. Length 22 mm.; breadth 12 mm.; height 10 mm. Length 21 mm.; breadth 12 mm.; height 10 mm. Length 20 mm.; breadth 11 mm.; height 9 mm. Length 19 mm.; breadth 10 mm.; height 8 mm. Length 18 mm.; breadth 10 mm.; height 9 mm. Length 17 mm.; breadth 10 mm.; height 8 mm.

James Island (11 specimens, beach)

Length 33 mm.; breadth 19 mm.; height 16 mm. Length 28 mm.; breadth 17 mm.; height 14 mm. Length 28 mm.; breadth 17 mm.; height 12 mm. Length 26 mm.; breadth 15 mm.; height 12 mm. Length 26 mm.; breadth 15 mm.; height 12 mm. Length 25 mm.; breadth 14 mm.; height 12 mm. Length 24 mm.; breadth 13 mm.; height 10 mm. Length 23 mm.; breadth 13 mm.; height 10 mm. Length 22 mm.; breadth 13 mm.; height 11 mm. Length 22 mm.; breadth 13 mm.; height 11 mm. Length 21 mm.; breadth 13 mm.; height 11 mm. Length 19 mm.; breadth 13 mm.; height 10 mm. Length 19 mm.; breadth 10 mm.; height 8 mm.

This species shows an extremely wide variation in size of its adult individuals, ranging from 17 mm. to 39 mm. in length. Throughout its range the greatest abundance in individuals seems to be reached in the Galapagos Islands. This species may be considered one of the less common of the Cypraeidae of the world, and one with quite a restricted distribution.

The series of bullae of this rare species warrants description, since they are undescribed, and show a remarkable early development of the anterior columellar teeth, uncommon in comparable stages in other Cypraeidae. Five early bulla stages are present in the collections; none is mature enough to have the outer lip in-turned. These five stages will be numbered here from youngest to oldest, bullae 1 to 5.

Bulla 1: This growth stage is represented by 3 specimens of from 6 mm. long by 3 mm. wide; 6.50 mm. long by 3.50 mm. wide, and 5 mm. long by 3 mm. wide. The color is not preserved in two of these; bleaching turns the bulla ivory-white. The dorsum is brown. Seven color bands are faintly visible dorsally on the outer lip; these are colored in an anterior-posterior direction; brown, white, brown, white, brown, white, brown. The brown spire sutures are colored by a narrow white line. The anterior one-half of the columella is white; the posterior one-half brown.

Bulla 2: Two beach specimens, one fresh and one faded, represent this stage. They are 7 mm, long by 4 mm, wide; 7.50 mm, long by 4 mm, wide. Eight color zones are present; from anterior to posterior they are the same as those of bulla 1, with an addition of a posterior white zone mottled with brown. The spire is brown with the suture white. The columella coloring is as in bulla 1.

Bulla 3: Two specimens, 11.50 by 4 mm. wide and 10 mm. long by 5 mm. wide, represent this stage. The eight color zones of bulla 2 persist, but with an addition of a yellowish-tinged white area over the anterior canal. The body whorl begins to become inflated, making the spire less conspicuous. The anterior one-half of the columella is white and the posterior one-half brown.

Bulla 4: One specimen, 17 mm. long by 8 mm. wide, represents this stage. Eleven color zones are present on the dorsum; in an anterior-posterior direction they are: brown, white, brown, white, brown, white, brown, white, brown, brown, white mottled with brown. The anterior half of the columella is white, while the posterior one-half is banded with brown. The spire continues to be obscured by the inflating body whorl.

Bulla 5: This stage is represented by one specimen, 19.25 mm. long by 9 mm. wide. The eleven color zones as present in bulla 4 persist, and the columella is colored the same. A terminal ridge of the anterior columellar region has formed, and 3 anterior columellar teeth have developed on the anterior one-third of the columella. The spire is as in bulla 4.

Mainland records:

United States National Museum: Manta, Ecuador; Parinas (Punta Parinas), Peru.

Pustularia pustulata (Lamarck)

Galapagos Islands records:

James Island (3 specimens, beach)

Length 24 mm.; breadth 15 mm.; height 11 mm. Length 16 mm.; breadth 12 mm.; height 6 mm. Length 15 mm.; breadth 10 mm.; height 6 mm.

The 16 mm. specimen is remarkably oval in proportion to its length. The

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24 mm, individual is larger than most specimens that the writer has examined from mainland localities.

Mainland records:

Harvard University: Mazatlán, Mexico.

University of California: Mazatlán, Mexico; west coast of Panama.

- California Academy of Sciences: San Marcos Island, Gulf of California, Mexico; Bay of Panama, Panama. Also various localities from the Gulf of California to the Bay of Panama.
- United States National Museum: La Paz, southwest side of Ceralbo Island, Cape Pulmo, Cape San Lucas, Lower California; near Modesto, Mazatlán, Tres Marías Islands, Acapulco, Mexico: Taboga Island, Panama.

Cypraea darwini Ingram, new species

Plate 2, figures 10, 11 (see p. 132)

Shell elongate-ovate; deep umbilicus present over posterior canal; spire completely obscured; well-defined lateral margin over posterior canal, and over posterior one-fourth of shell; well-defined lateral margin over both sides of anterior one-third of shell; dorsally, shell absent over anterior canal; outerlip teeth deeply incised anteriorly, with incisures shallow posteriorly; anterior one-third of outer-lip teeth, after first two which are short, are approximately 2 mm, in length, extending free from the lip and directed into the interior of the shell; outer-lip teeth confined to the aperture edge, not extending over the base; fossula absent; anterior four columellar teeth approximately 3 mm, in length and prominent; remainder of these teeth from 1 mm. to 1.50 mm. in length; anterior four columellar teeth slant diagonally toward the outer lip in shell interior; terminal ridge heavy, directed obliquely into aperture; columella lip of anterior canal narrow, very slightly produced; outer lip of anterior canal not produced, broadly rounded; anterior canal bends gradually to the left; posterior canal bends strongly to the left; posterior canal lips approximately equal; posterior maximum width of aperture is 2.50 mm.; anterior maximum width of aperture is 3 mm. The type measures : length, 26 mm.; breadth, 16 mm.; height, 13.50 mm.

Holotype, No. 8046, Calif. Acad. Sci. Paleo. Type Coll., from Loc. 27250 (C.A.S.), old beach deposit probably 5 feet thick, along beach of bay on northwest part of island on west side, **South Seymour Island, Galapagos Islands**; L. G. Hertlein, collector. Subfossil.

Discussion: From the dorsal side, anteriorly the shell recalls *C. albuginosa* Gray, while posteriorly the shell recalls *C. nigropunctata* Gray. The columellar teeth and the anterior outer-lip teeth are extremely different from any of the Cypraeidae occurring in the Galapagos Islands. The shell is intact and is crusted with a hard deposit, possibly limestone.

Only one specimen was collected by Dr. Hertlein; it is not aberrant, for the specific characteristics are well formed. It seems quite likely that others will be found with further exploration, and it may well be that living individuals of this species will be found when an attempt is made to collect only living, and not beach, shells from these islands. The Cypraeidae collection discussed here indicates either that the greater part of collecting was confined to the beaches, or that the habitat in which the Cypraeidae live in the Galapagos Islands is extremely secluded.

This new species is named for Charles Darwin.

KEY TO THE LIVING CYPRAEIDAE OF THE GALAPAGOS ISLANDS

A. Dorsum	not	nodul	led
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	a)		sula absent
		<i>b</i>)	Shell ocellated on dorsumalbuginosa
		bb)	Shell not ocellated on dorsum
			c) Shell with transverse bands under outer layernigropunctata
			cc) Shell without transverse bandsmoneta
	aa)	Fos	sula present
		d)	Teeth extending over base, marked with browncervinetta
		dd	Teeth not extending over base, not marked with brown
			e) Canals covered with orange blotches superimposed with black
			isabella mexicana
			ee) Canals not covered with orange blotches and not superimposed with black
			arabicula
Β.	Do	rsum	noduledpustulata

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